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EXAMINER

MORGAN, ROBERT W

ART UNIT PAPER NUMBER

2166

DATE MAILED: 12/05/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

TR

**Office Action Summary**

Application No.

09/267,176

Applicant(s)

BURKE ET AL.

Examiner

Robert W. Morgan

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_                      6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. In the amendment filed 9/24/01 in paper number 9, the following has occurred: Claim 1 has been amended and claims 2-31 have been added. Now claims 1-31 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,974,369 to Radtke et al.

As per claim 1, Radtke et al. teaches a method for automatically managing energy cost using metering data and pricing data comprising the steps of:

--the claimed receiving metering data from a utility meter, wherein the metering data is electronically transmitted from the utility meter is met by the ability of the system to receive metering data and distribute the metering data electronically over a network (see: column 2, lines 17-23);

--the claimed receiving pricing data electronically over a network, wherein the pricing data is associated with a plurality of sources of power is met by the ability of system receive

Art Unit: 2166

price information over a network relating to the different number power sources used to reflect pricing data (see: column 2, line 17-23);

--the claimed forecasting a forecast load based on the received metering data from the utility meter is met by the ability of the system to send and receive utility information based on price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values for the respective meter based on the consumption that has occurred thus far during the interval (see: column 8, lines 33-38 and column 10, lines 33-42); and

--the claimed determining an optimal consumption decision based on the received pricing data and the forecast load is met by the ability of system to use price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values that inherently implies the optimal consumption decision would be attained from utilizing this information (see: column 8, lines 33-38 and column 10, lines 33-42).

As per claim 2, Radtke et al. teaches the claimed step of delivering the optimal consumption decision to a customer is met by the ability of system to use price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values inherently implies that this information would be given to the customer to inform them of current energy usage (see: column 8, lines 33-38 and column 10, lines 33-42).

As per claims 3-5, Radtke et al. teaches the claimed utility meter comprises an electric meter, a gas meter and a water meter (see: column 14, lines 4-11).

As per claim 6, Radtke et al. teaches the claimed metering data is electronically transmitted from the utility meter via a telephone line (see: column 15, lines 16-21).

Art Unit: 2166

As per claim 7, Radtke et al. teaches the claimed pricing data includes grid price point data, distributed generation price point data, demand-side management price point data and alternative fuel price point data is met by using the network to <sup>be kept</sup> kept apprised of changes in the price of energy inherently including that the increase or decrease of any other alternative fuel prices used to determine a price point (see: column 12, lines 59-67).

As per claim 8, Radtke et al. teaches the claimed network is the Internet is met by information stored and distributed over any type of network such as the Internet (see: column 1, lines 16-24).

As per claim 9, Radtke et al. teaches the claimed determining a price baseline for at least one of the plurality of the sources of power, as a function of the forecast load and of price point data for the at least one of the plurality of sources of power is met by the ability of the system to send and receive utility information based on price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values as well as using the network to kept apprised of changes in the price of energy inherently including that the increase or decrease of any other alternative fuel prices used to determine a price point (see: column 8, lines 33-38, column 10, lines 33-42 and column 12, lines 59-67).

As per claim 10 Radtke et al. teaches the claimed determining a price baseline for a combination of one or more of the sources of power, wherein the price baseline is determined by price point data for the one or more sources of power, the forecast load and a percentage of the forecast load which will be met by each of the one or more sources of power is met by using the network to kept apprised of changes in the price of energy inherently suggesting that this would include sources of power and forecasting sources of power (see: column 12, lines 59-67).

As per claim 11, Radtke et al. teaches the claimed forecasting step further comprises receiving weather data and forecasting a forecast load based on the received metering data from the utility meter and the weather data (see: column 12, lines 59-67).

As per claim 12, Radtke et al. teaches the claimed determining step further comprises receiving financial market data and determining an optimal consumption decision based on the received pricing data, the forecast load and the financial market data is met by the use of price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values that inherently suggest that information from the financial market are used to help determine and forecast price information for energy (see: column 8, lines 33-38 and column 10, lines 33-42).

As per claim 13, Radtke et al. teaches the claimed additional forecasting data is received via the Internet (see: column 12, lines 59-67).

As per claim 14, Radtke et al. teaches the claimed optimal consumption decision is further based, in part, on the additional forecasting data (see: column 12, lines 59-67).

As per claims 15 and 16, Radtke et al. teaches the claimed determining an optimal consumption decision includes calculating an optimal cost curve and applying an optimization algorithm to the pricing data and the forecast load is met by the ability of system to use price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values and uses a network to provides updates of prices and forecast information inherently suggest that a software program is used to calculate and apply optimal cost curve related to area of price and forecasting (see: column 8, lines 33-38, column 10, lines 33-42 and column 12, lines 59-67).

As per claim 17, Radtke et al. teaches the claimed optimal consumption decision is delivered to the customer via the Internet (see: column 1, lines 16-24 and column 12, lines 59-67).

As per claim 18, Radtke et al. teaches the claimed allowing the customer to choose to receive power from one or more of the plurality of sources of power is met by the ability of the system to receive meter data to help calculate consumption amounts and consumption rate for a customer inherently would afford an option for the customer as to which company will provide their power (see: abstract).

As per claim 19, Radtke et al. teaches the claimed electronically delivering a bill for power from one or more utilities to the customer (see: column 11, lines 50-61 and column 12, lines 55-58).

As per claim 20, Radtke et al. teaches the claimed allowing the customer to pay the bill electronically (see: column 12, lines 55-58).

As per claim 21, Radtke et al. teaches the claimed automatically implementing the optimal consumption decision, wherein the automatically implementing includes automatically providing power from one or more of the plurality of sources of power to the customer based upon the optimal consumption decision is met by the ability of the system to receive meter data to help calculate consumption amounts and consumption rate for the user inherently would provide consumption information to automatically select power from the company that would save the most amount of money for the customer (see: abstract).

***Claim Rejections - 35 USC § 103***

Art Unit: 2166

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,974,369 to Radtke et al.

As per claim 22, Radtke et al. a system for automatically managing energy cost using metering data and pricing data, the system comprising:

--the claimed at least one utility meter for recording and transmitting the metering data (see: column 14, lines 20-30);

--the claimed network (see: column 1, lines 16-24).

Radtke et al. fails to explicitly teach:

--the claimed at least one server; and

--the claimed at least one server is configured to receive the metering data from the at least one utility meter, to receive the pricing data from the network, to determine an optimal consumption decision and to transmit the optimal consumption decision to a customer.

The examiner takes Official Notice that using a server to receive information over a network is old and well known in the computer-business energy management field. Therefore, it would have obvious to person of ordinary skill in the art at the time invention was made to include at least one server to receive utility information over a network with the system of recording and processing of metered information as taught by Radtke et al. in order to allow information to be retrieved over a network more efficiently and effectively.



Art Unit: 2166

As per claims 23-25, Radtke et al. teaches the claimed at least one utility meter includes an electric meter, a gas meter and a water meter (see: column 14, lines 4-11).

As per claim 26, Radtke et al. teaches the claimed at least one utility meter is configured to transmit the metering data to the server via a telephone line (see: column 15, lines 16-21).

As per claims 27-29, Radtke et al. teaches a process control network (184, Fig. 3) comprised of a local operation network ("LON") that transfers data among intelligent communication devices called nodes (see: column 14, lines 50-61).

Radtke et al. fail to explicitly teach at least one central server and at least one regional server for receiving metering data, pricing data from the network, determining the optimal consumption decision and transmit the optimal consumption decision to the at least one regional server and to the customers.

The examiner takes Official Notice that using a server to receive information over a network is old and well known in the computer-business energy management field. Therefore, it would have obvious to person of ordinary skill in the art at the time invention was made to include at least one central server and at least one regional server to receive utility information over a network with the system of recording and processing of metered information as taught by Radtke et al. in order to allow information to be transmitted and retrieved over a network more efficiently and effectively.

As per claim 30, Radtke et al. teaches the claimed network comprises the Internet is met by information stored and distributed over any type of network such as the Internet (see: column 1, lines 16-24).

As per claim 31 Radtke et al. teaches the claimed network comprises a wide area network is met by information stored and distributed over any type of network such as the Internet (see: column 1, lines 16-24).

***Response to Arguments***

In the remarks, applicants argue in substance that the reference of Johnson does not contain the mention of receiving metering data electronically transmitted from a meter, receiving pricing data associated with a plurality of sources of power, describe forecasting a forecast load based on metering data and determining an optimal consumption decision based on metering and pricing data.

In response applicant argument, while the reference of Johnson does not contain the all the mentioned metering data, the reference of Radtke et al. teaches receiving metering data electronically transmitted from a meter by the ability of the system to receive metering data and distribute the metering data electronically over a network (see: column 2, lines 17-23), receiving pricing data associated with a plurality of sources of power by the ability of system to receive price information over a network relating to the different number power sources used to reflect pricing data (see: column 2, line 17-23), describe forecasting and a forecast load based on metering data by the ability of the system to send and receive utility information based on price data for future time intervals which help calculate a projected/predicted end-of-interval consumption values for the respective meter based on the consumption that has occurred thus far during the interval (see: column 8, lines 33-38 and column 10, lines 33-42), and determining an optimal consumption decision based on metering and pricing data by the ability of system to use price data for future time intervals which help calculate a projected/predicted end-of-interval

Art Unit: 2166

consumption values that inherently implies the optimal consumption decision would be attained from utilizing this information as described above in the new rejection of claims 1-31 (see: column 8, lines 33-38 and column 10, lines 33-42).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Morgan whose telephone number is 703-605-4441. The examiner can normally be reached on 8:30 a.m. - 5:00 p.m. Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R Hafiz can be reached on 703-305-9643. The fax phone numbers for the

Art Unit: 2166

organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

rwm

December 3, 2001



TARIQ R. HAFIZ  
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